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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/612,810 07/10/00 BRADLEY

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EXAMINER

ADDTE, R

ART UNIT

PAPER NUMBER

3673

8

DATE MAILED:

09/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No. <b>09/612,810</b>	Applicant(s) <b>Bradley</b>
	Examiner <b>Raymond Addie</b>	Art Unit <b>3673</b>

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Jul 12, 2001

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-44 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on Jul 10, 2001 is/are objected to by the Examiner.
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.
- 12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15)  Notice of References Cited (PTO-892)
- 16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3,5-7

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

19)  Notice of Informal Patent Application (PTO-152)

20)  Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ballast tube is longer than the elongated container of Claim 36 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5, 16-21, 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "capable of" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 4, lines 2-3 recite "container is formed by stitching, gluing heat bonding or attaching by other means a geotextile material into a tubular shape". The scope of the claim is indefinite because, one of ordinary skill in the art, would not know what "by other means" would encompass. Therefore, it is indefinite as to what is being claimed.

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Regarding claim 16, the phrase "capable of" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). It has been held that the phrase "capable of" is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. Hence, it is unclear as to whether the Applicant considers any structure, functioning to "maintain an independent solid fill level and pressure" to be within the scope of the claimed invention.

While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "scour apron" in claim 19 is used by the claim to mean "an anchor tube," while the accepted meaning is "a geotextile for use in a blanket-type application, for protecting a marine bed from tidal or current induced scouring."

In regards to Claim 32, lines 2-3 recite "geotextile material is made impermeable by coating on the exterior surface". Lines 3-4 recite "to render the geotextile material less permeable. Hence, it is unclear as to whether the Applicant is claiming a "substantially or totally impermeable geotextile material" or a "partially impermeable geotextile material". The difference being a structural limitation that directly impacts which prior art references to apply to the limitation. For examination purposes, the claim is interpreted to recite a "totally impermeable, geotextile material".

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradley # 5,902,070.

Bradley discloses a system for maintaining fill material solids in position to form a barrier or a dam (20). The system comprising:

A 1st elongated sheet of geotextile material (21, 50, 60) that is coiled to form a helical structure.

A means for seaming (54) said 1st elongated sheet into a 1st continuous tubular-shaped container.

Fill material solids (18) positioned inside said 1st tubular-shaped container, such that a barrier or dam (20) is formed.

In regards to Claim 2, Bradley discloses a 2nd elongated sheet (F) for use in forming a double walled, tubular container. See col. 10, line 42-col. 11, line 7.

In regards to Claims 3-5 Bradley discloses an alternative embodiment (90) of the tubular-shaped container comprising: At least 2 layers of geotextile material, one layer nested inside the other.

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Both layers being helically coiled, by stitching, thereby forming a container having an inner liner and opposed, closed ends. See Fig. 15; col. 12, lines 30-55.

6. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Dooleage # 5,125,767.

Dooleage discloses a barrier (10) comprising:

An elongated container (15', 13)

A plurality of ballast tubes (11, 12, 17) within the container, the ballast tubes each having an inside space and a space adjacent the outside surface of said ballast tubes.

Each ballast tube being enclosed such that there is no substantial communication or flow, between independent ballast tubes. Each ballast tube maintains an independent solid fill level and pressure via ports (14, 15, 21).

Each elongated container is substantially impermeable via use of impermeable geotextile material. See Abstract; col. 1, line 30-col. 3, line 30.

7. Claim 44 is rejected under 35 U.S.C. 102(b) as being anticipated by Cizek et al. # 5,232,429.

Cizek et al. discloses an elongated fabric formed into a tube, sleeve, or sock of woven textile sheet material (10). Said fabric being helically shaped and joined at a spiral seam (22) by

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draping the fabric over a drum (34) and securing the spiral seam, thereby forming a tubular, elongated container. See col. 6.

***Claim Rejections - 35 USC § 103***

8. Claims 6-10, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley in view of Holmberg # 4,889,446.

Bradley discloses essentially all that is claimed, except for the use of cradle tubes. However, Holmberg teaches an erosion control foundation mat (10) formed of geotextile material.

Said mat comprising: a plurality of cradle tubes (26) positioned adjacent, parallel to, and on opposite sides of a tubular-shaped container (24) forming a barrier or dam. Said cradle tubes increase the stability of the mat upon a surface being protected. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the geotextile container of Bradley, with at least one cradle, in order to increase the stability of the container. See Holmberg Abstract; Fig. 1, col. 5, lines 6-45.

In regards to Claims 13-15 Holmberg teaches the use of a scour apron comprising a blanket (20), which is connected to the bottom side of the 1st tubular-shaped container and at least one cradle tube (26). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Bradley with a scour apron, as taught by Holmberg, in order to reduce rip tide scouring of the soil adjacent the barrier.

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9. Claims 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley in view of Holmberg '446 as applied to claim 10 above, and further in view of Dooleage # 5,125,767.

Bradley in view of Holmberg discloses essentially all that is claimed, except for the use of filler tubes. However, Dooleage teaches a method and apparatus for constructing hydraulic dams and the like. Said apparatus comprising:

A plurality of elongated, tubular containers (15', 13).

Said tubular containers having filler tubes (11, 12) and anchor tubes (19) disposed within an interior space of said tubular containers. Said filler tubes and anchor tubes increase the stability of the tubular containers under the influence of tidal action.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Bradley in view of Holmberg, with filler tubes, as taught by Dooleage, in order to provide internal stability to a barrier experiencing tidal forces. See col. 2, lines 56-66.

10. Claims 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Holmberg # 4,889,446.

Dooleage discloses essentially all that is claimed, except for the use of scour aprons and attached anchor tubes. However, Holmberg teaches an erosion control foundation mat (10) comprising:

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A scour apron (20) having attached anchor tubes (22, 26). Said apron and tubes stabilize a ballast filled tube (24) forming a shoreline barrier. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier of Dooleage, with a scour apron assembly, as taught by Holmberg, in order to increase the stability of the container. See Holmberg Abstract; Fig. 1, col. 5, lines 6-45.

In regards to Claim 22-24 Dooleage discloses a method of forming a barrier. Said method comprising the steps of:

Providing an elongated container (13).

Providing a plurality of independent ballast tubes (11, 12) within the container. Each ballast tube being enclosed such that there is no substantial communication or flow between independent ballast tubes.

Pumping water into the ballast tube.

What Dooleage, does not disclose is the method step of filling the ballast tubes with solid fill material. However, Holmberg teaches a method of erosion control comprising the steps of: pumping fill material solids into dam or barrier-forming, elongated containers, and ballast tubes (11, 12) and, via a pumping device (64). See col. 7, lines 15-50. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the method of forming a barrier of Dooleage, with the method of forming a barrier, as taught by Holmberg, in order to increase the dead weight of the barrier.

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11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Paoluccio # 4,555,201.

Dooleage discloses essentially all that is claimed as put forth with respect to Claim 16 above, but does not disclose a ballast tube being partially filled with a solid fill material. However, Paoluccio teaches sediment dike apparatus and method comprising:

An elongated tube partially filled with a solid fill material (15A), which can be sand, soil or the like, along or mixed with water. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with a solid fill material, as taught by Paluccio, in order to increase the dead weight of the barrier. See Paoluccio Fig. 2; col. 2, line 61-col. 3, line 11.

12. Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Paoluccio as applied to claim 25 above, and further in view of Holmberg # 4,889,446. Dooleage in view of Paoluccio discloses essentially all that is claimed, except for a scour apron and anchor tube assembly. However, Holmberg teaches an erosion control system comprising an elongated container, having a scour apron (20) a 1st cradle tube (26) positioned adjacent to the container, and an anchor tube (22). Said scour apron being in the form of a blanket and supports the elongated container on the underside of said elongated container. See Fig. 4.

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13. Claims 31, 33, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Paoluccio # 4,555201.

Dooleage discloses a barrier (10) comprising:

An elongated container (15', 13).

A plurality of ballast tubes (11, 12, 17) within the container, the ballast tubes each having an inside space and a space adjacent the outside surface of said ballast tubes.

Each ballast tube being enclosed such that there is no substantial communication or flow, between independent ballast tubes. Each ballast tube maintains an independent solid fill level and pressure via ports (14, 15, 21).

Each elongated container is substantially impermeable via use of impermeable geotextile material. See Abstract; col. 1, line 30-col. 3, line 30.

What Dooleage does not disclose is the use of solid, fill-material within the ballast tubes.

However, Paoluccio discloses a sediment dike apparatus comprising: a mixture of water and soil/cement/sand. Said apparatus having inlet ports (16,18b,18c) for the water and the soil as well as outlets (20), to drain water only from the apparatus. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with inlet and outlet ports, as taught by Paoluccio, in order to fill the apparatus at a very rapid rate. See Paoluccio col, 3, line 45-col. 4, line 44.

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In regards to Claims 33, 34 Dooleage discloses the use of a geotextile material made from vinyl plastic, reinforced neoprene rubber or reinforced butyl rubber. It is old and well known that vinyl plastics are used to form synthetic fibers for reinforcing other geotextile materials.

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Paoluccio as applied to claim 31 above, and further in view of Cizek et al. # 5,232,429.

Dooleage in view of Paoluccio discloses essentially all that is claimed, to include a barrier having partially permeable and impermeable sections to improve draining the container of water and fill solids. What the combination does not disclose is making the container impermeable by applying a waterproof coating to the container. However, Cizek et al. teaches a method for making, and a continuous tube of geotextile material. Said tube having an area made impermeable by application of a coating of polymeric or rubber or a wax. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage in view of Paoluccio, with a coating of waterproof material, as taught by Cizek et al. in order to control the rate of permeability of the barrier. As suggested by Paoluccio. See Paoluccio col. 3, lines 50-55; Cizek et al. col. 2, lines 17-21.

15. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage. Dooleage discloses an apparatus (10) for forming a barrier comprising:  
An elongated container (15) having 2 opposed ends.

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A plurality of independent ballast tubes (11, 12) extending longitudinally within the container.

The ballast tubes each having an inside and outside space, the ballast tubes being configured to receive fill material solids on their respective inside spaces.

What Dooleage does not disclose is the relative length of the elongated container and the ballast tubes. However, Dooleage recognizes the desirability to increase the dead weight of the barrier, by providing anchor means (19) associated with the ballast tube (11, 12), either at the ends or intermediate to the ends of the ballast tube, to stabilize the barrier. Hence, it would obvious to one having ordinary skill in the art, at the time the invention was made, to make the anchor means integral with the ballast tube, in order to simplify the construction of the barrier.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with a ballast tube that is longer than the elongated container, in order to provide an anchor means to the barrier, as suggested by Dooleage. See col. 3, lines 1-30.

16. Claims 35, 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Bradley # 5,902,070.

Dooleage discloses essentially all that is claimed, except for the use of both permeable and impermeable geotextile fabrics. However, Bradley teaches a geotextile container (80) comprising a double layer construction having an inner, non-permeable layer (68) and an outer layer (69) of unknown permeability. Bradley further teaches that the container can be made from

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permeable and/or non-permeable geotextiles, as the application demands. See col. 3, lines 15-30, col. 9, lines 13-25, col. 10, lines 42-56, col. 12, line 30-col. 13, line 34.

In regards to Claims 37-41, which depend from Claim 36, Dooleage discloses an elongated fabric container (15) having 2 opposed ends.

A plurality of independent ballast tubes (11, 12) extending longitudinally within the container. The ballast tubes each having an inside and outside space, the ballast tubes being configured to receive fill material solids on their respective inside spaces. What Dooleage does not disclose is reinforcing the container with a plurality of reinforcement device. However, Bradley teaches a geotextile container having a plurality of spaced hoops, a spiral hoop formed by stitching several layers of geotextile sheet material together, to form a helically coiled tube, stitched about a spiral seam (54) on the outside of said container. See col. 6, line 57-col. 7, line 7. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the make the barrier in a helically coiled tube, in order to increase the radial load strength of the container.

17. Claims 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dooleage in view of Labora GB 1,48,986

Dooleage discloses all that is claimed, as put forth with respect to Claim 35 above, but does not disclose a plurality of longitudinally spaced, reinforced regions along the length of the elongated

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container. However, Labora teaches an elongated container (1) having a plurality of longitudinally spaced, reinforced regions (6, 7, 8) being supportive of the elongated container and providing a greater resistance to stress than the fabric of the container. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with longitudinally spaced reinforced regions, as taught by Labora, in order to increase the load strength of the barrier. See Labora cols. 2, 3.

In regards to Claim 43, Labora teaches the use of longitudinal belts (4), which can be formed as an integral part of the opposing walls of the container. Said reinforced regions and longitudinal belts can be plastic or metal, in the shape of strips, cords, plates etc., and can be arranged depending on the objects being sought. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the barrier of Dooleage, with a longitudinal belt, as taught by Labora, in order to increase the load strength of the barrier.

Mohammed et al. # 5,507,900 discloses a continuous polymer and fabric composite. Hornbostel, Jr. # 3,373,568 discloses a revetment device. Melin # 5,857,806 discloses a damming device. Carter et al. # 6,126,362 discloses a damming device.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (703) 305-0135. The examiner can normally be reached on Mon-Fri from 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



Thomas B. Will  
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Group 3600

RWA  
9/12/2001